

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6: C12Q 1/68, C12P 19/34, C07H 21/02, 21/04	A1	(11) International Publication Number: WO 97/41263 (43) International Publication Date: 6 November 1997 (06.11.97)
--	----	---

(21) International Application Number: PCT/US97/07676 (22) International Filing Date: 28 April 1997 (28.04.97) (30) Priority Data: 08/640,389 29 April 1996 (29.04.96) US	(81) Designated States: AU, CA, IL, JP, KR, NO, NZ, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).
(71) Applicant: PROGENITOR, INC. [US/US]; 1507 Chambers Road, Columbus, OH 43212 (US).	Published With international search report.
(72) Inventors: SNODGRASS, Ralph, H.; 650 Retreat Lane, Powell, OH 43065 (US). CIOFFI, Joseph; 1180 Bayboro Drive, New Albany, OH 43054 (US). ZUPANCIC, Thomas, J.; 501 Park Boulevard, Worthington, OH 43085 (US). SHAFER, Alan, W.; 256 Lakeview Drive, Lancaster, OH 43130 (US).	
(74) Agents: POISSANT, Brian, M. et al.; Pennie & Edmonds L.L.P., 1155 Avenue of The Americas, New York, NY 10036 (US).	

(54) Title: DETECTION OF THE LEPTIN RECEPTOR IN REPRODUCTIVE ORGANS AND METHODS FOR REGULATING REPRODUCTIVE BIOLOGY

(57) Abstract

The present invention relates to variant forms of the receptor for the *obese* gene product. In particular, the invention relates to methods of detecting receptor variants in the reproductive organs for the diagnosis of the cause of infertility. In addition, it relates to methods of inhibiting or down-regulating expression of defective variants in cells to augment their responsiveness to regulation by leptin as well as methods of using compounds to directly activate signal transduction pathways associated with this ligand-receptor system to improve fertility.

BEST AVAILABLE COPY